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PECULIARITIES OF USING CLUSTER METHOD IN INTEGRATION OF INTER-BRANCH STRUCTURES IN AGROINDUSTRIAL COMPLEX

R. S. Kholikova
Tashkent State University of Economics, rxoliqova@bk.ru

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shown the estimation for Uzbekistan):

- 1) the efficiency of the work of customs authorities(2.10);
- 2) the quality of the infrastructure(2.57);
- 3) simplicity in the organization of international supply of goods(2.42);
- 4) competence in logistics(2.59);
- 5) the ability to track the goods throughout the supply chain(2.71);
- 6) compliance with delivery deadlines(3.09).

Experts drew attention to the need for accession to agreements and conventions in the field of transport, infrastructure and logistics. It should be mentioned that in November 2017 there was held International Conference called "Central Asia: One Past and a Common Future, Cooperation for Sustainable Development and Mutual Prosperity" in Samarkand, Uzbekistan. Where the president of the Republic of Uzbekistan Shavkat Mirziyoyev initiated the proposal of the UN General Assembly resolution "Strengthening regional and international cooperation to ensure peace, stability and sustainable development in the Central Asian region". The resolution places special emphasis on the development of transport infrastructure and transit corridors, on strengthening the interaction of all modes of transport, including the opening of new roads and railways, as well as air routes. That is why in September 2018, Tashkent became an international expert platform for developing ideas and proposals for the further development of transport projects in Central Asia: an international conference on "Central Asia in the System of International Transport Corridors: Strategic Perspectives and Unrealized Opportunities" was held in the capital. In the conference the perspectives of creation of a single international transport hub were discussed.

Conclusion

Uzbekistan is one of the fast developing countries in the world. Many modern successful states, building their own development models, spent hundreds of years developing the economy, the political and legislative system. Against this background, the successes achieved by Uzbekistan in just 27 years surprise or at



least arouse the interest of the world community. The phenomenon of the "Uzbek development model" is recognized by experts and analysts of leading international financial institutions and research centers. For a historically short period of time, the country actively joined the process of international economic relations.

References:

- [1]. Development of logistics centers in Uzbekistan. 2015. -2-3 pages
Gulyamov Saidakhror Saidahmedovich, academician, doctor of economic sciences, professor, head of the department. Institute for Advanced Training of the State Statistics Committee of Uzbekistan;
Shermukhamedov Abbas Tairovich, doctor of Physical and Mathematical Sciences, professor Tashkent Branch of the Russian Economic University named after G.V. Plekhanov
- [2]. Realities and prospects for the development of transport and logistics ", [31.01.2017]
- [3]. Logistics as an important link in the economy, D. Mirzakhalilova [06.03.2013]
- [4]. <http://kommersant.uz/news/eksperty-obsudili-problemu-avtomobilnyh-gruzoperevozok-v-uzbekistane>
- [5]. <https://lpi.worldbank.org/international/global?sort=desc&order=LPI%20Score#datatable>



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PECULIARITIES OF USING CLUSTER METHOD IN INTEGRATION OF INTER-BRANCH STRUCTURES IN AGRO- INDUSTRIAL COMPLEX

Kholikova Rukhsora Sanjarovna,

PhD. Researcher, Tashkent State University of Economics,

E-mail address: rxoliqova@bk.ru

Аннотация: Мақолада ички ва ташқи бозорлар учун пахта хом ашёсини қайта ишлаб ундан рақобатбардош тайёр маҳсулот яратишда иштирок этувчи агросаноат мажмуасининг интеграцион тузилмалари шаклланишида кластер методининг ўзига хос хусусиятлари кўрсатилган. Шунингдек, агросаноат мажмуасида кластерлашувнинг паст даражаси аниқланиб, тизимдаги муаммолар борасида муаллиф томонидан таклифлар келтирилган.

Калит сўзлар: кластер, интеграция, агросаноат, агросаноат мажмуаси, кўп босқичли ишлаб чиқариш, тармоқлараро интеграция, кластерлашув, инновацион кластер, пахта саноати

Аннотация: В статье рассматриваются особенности применения кластерного метода в формировании интеграционных структур в агропромышленном комплексе в производстве переработке хлопка сырца и получения из него конкурентоспособной конечной продукции для внутреннего и внешнего рынка. Представлен обзор научных мнений учёных на состояние и направление развития региональной кластерной политики. Выявлены недостатки низкой кластеризации в агропромышленном комплексе.

Ключевые слова: кластер, интеграция, агро производство, агро-индустриальная структура, многостадийное производство, межотраслевая интеграция, кластеризация, инновационный кластер, агро-индустриальный комплекс, хлопковое производство.

Abstract: The article examines the role of the cluster approach in the integration of structures in the agro-industrial complex in the production of raw

cotton, processing of fiber and obtaining from it competitive final products for the internal and foreign markets. There are also considered features of application of a cluster method in formation of integrated in agro-industrial complex in processing of raw cotton and receiving from it competitive ready-made products for domestic and foreign markets. Drawbacks of low clustering in agro-industrial complex are revealed.

Keywords: cluster, integration, agro production and agro-industrial structures, multistage process, inter-branch integration, clustering, innovative cluster, agro-industrial complex, cotton processing and production.

Introduction

The economic system of Uzbekistan represents as the complex of multilevel and multistage structure consisting of the interconnected objects performing a large number of functions. Efficiency in functioning of such difficult systems has to be satisfied with many directions including the correct organizational and administrative decisions.

In our days five priority directions which are put forward today by the President of the Republic of Uzbekistan Sh. Mirziyoev strategy action for 2017-2021 are very relevant and timely in further development of national economy of Uzbekistan in all branches of the national economy of the republic [1].

As it is widely considered, textile industry is one of the important components that contribute to the GDP of the country. And the main sector of this industry cotton production is one of the fastest growing in the world. The industry supports entities and people with necessary items, such as various materials like raw cotton, fiber, seeds and ready-made goods. Also to cotton processing as a major mechanized sphere is given a prior role in the national economy. Therefore, the sustainable innovative development of the sector is a key priority of any development strategy directed at economic progress and rising living conditions. In recent years' sector underwent serious reforms and achieved success. Efficient organization of well-maintained modern technologies, scientifically systematic approach to technical

planning and seed growing, strong governmental support for farmers were the base for achieving best results.

Obviously, the system of cotton growing and processing it in our country has a long history. But only in the years of Independence as was in all other spheres of our life cotton growing and cotton fiber producing fields began to develop considerably.

For the years of instantaneous economic growth Uzbekistan's policy aimed at improving the quality of cotton products, increase of domestic processing as well as maintaining the volume of production and promotion of breeding of cotton varieties. In one way, the works were performed to increase the efficiency of production of industrial enterprises through their modernization with modern machines and high technology, in other, to advance the quality and raise the competitiveness of manufactured cotton products, upgrading the seeds and so on.

Nowadays economic tasks of formation of the structuration mechanisms and increasing efficiency, realization of integrated agro-industrial organizational and production structures require the systematic and complex solution.

Currently, innovation and research is a key factor in achieving new goals and creating healthy competition in all areas. In particular, the reforming of the agricultural sector on the basis of the effective application of modern methods and technologies gives significant results. Indeed, the growth of national competitiveness, increasing the efficiency of domestic enterprises in the global and domestic markets is the goal of economic policy of any state. Foreign experience shows that the cluster approach is recognized globally as a policy of improving the competitiveness of both the national and regional economies.

In his speech at the official meeting of the parliament, the President of our country emphasized that Uzbekistan sees the future of cotton growing in a cluster method by covering all processes: from cotton cultivation to the production of finished products. As he mentioned in his report speech to Oliy Majlis: "Today we decided to create 48 cotton-textile clusters in order to reach high indicators in

harvesting raw cotton at minimum 52 % with the help of cluster method next year. Accepting the fact that clusters are considered as new practice for our economy, it is necessary to revise procedures for governmental support, as well as expenses funding system, landing and simplifying the credit system”[2] In this case, appears the relevance of creation of economic integration inter-branch structures and close interrelations on production between the enterprises, the companies and corporations.

Literature review

Introductions of integration structures and using a cluster method and its management are explained in works of foreign classics in economic science such as A. Marshall[3], M. Porter[4], O. Williamson, J. Schumpeter, A. Weber, S. Rosenfeld[5], E. Dakhmen[6], P.Krugman, , I. Sampler, D. Solye, E. Limer, etc. and also outstanding researchers, scientists from the CIS countries: A.O. Ayusheev[7], A.N. Oleynik, N.V Smorodinskaya, D.D. Katukov, R.I. Kapelyushnikov, I.N. Kolosovsky, E.G.Karpova[8], P.M. Alampiyev, Y.G. Saushkin, V.R. Khachaturov, E.V.Ivanova[9] and etc.

Moreover, methodological problems of agrarian integration of the member countries of the CIS are covered in researches of Korobeynikov M.A, Korovkin V. P., Krilatovikh E.N., Serkov A.F., Stokovoya O.G., Tkach A. V., Ushachev I.G. and also about the organization of cluster types were devoted works of scientists from the CIS countries such as: S. Dreving [10], E. Ageeva, N. Andronnikova, S. Barngolts, A. Vasilyev, N. Volkova [11], Ya. Dranev, V. Yemelyanov, E. Yerokhina, G. Kuntz, Yu. Lavrikova [12], S. Pyatinkin [13], T. Bykova, V. Tretiak, Yalov [14], I. Denisova, G. Vlaskin, A. Rasulev, in the place with it scientists from Uzbekistan A. Bekturodov [15], D. M. Kurbanov [16], S.M.Kasimov, D. M. Mirzakhililova [17], S.S. Kasimov[18] and others.

However, there are still unresolved problems in creations of effective models of formation of organizational structures in inter-branch mechanism considering features of interaction in management of agrarian industrial complex.



The existing researches, despite the big scientific and practical importance, have the incomplete character which is expressed in consideration of one or several regulating mechanisms that confirm need of further researches in the field of state regulation of the agrarian in modern conditions of inter-branch communications on a full technological chain of production of a finished product. It is also important to know, that, it is necessary to create and provide new jobs especially in rural places of the republic. Taking into account regional conditions of the country and some other problems, slow formation and development of various forms of ownership gives defining character to task of ensuring sustainable development of the agrarian sector of economy. All this demonstrates relevance of this problem and requires its fastest solution.

Research methodology

During our research we have used a number of methods, including comparative analysis, logical analysis, analysis and synthesis, induction, deduction methods. The research methodology of given article is conducted with quantitative data. It can be seen, the article is written to prove basic fundamental-theoretical aspects of the cotton industry entities and how to manage them in order to minimize the expenses and receive more profit for the company. Furthermore, quantitative methods are based on data that can be empirically measured with numbers.

Analysis and results

One of the policy priorities of Uzbekistan, the world's fifth-largest cotton exporter, is further innovative development of its textile industry. Annually, the country grows about 3.5 million tons of raw cotton, produces 1.1 million tons of cotton fiber [19]. Uzbekistan is the world's sixth-largest cotton producer among 90 cotton-growing countries [20].

Additionally, country is expected to achieve full processing of cotton fiber in 2021. By 2020, the capacity of local enterprises will ensure full processing of cotton produced in Uzbekistan, which can lead to a significant decrease in the export

supplies of this crop. Only in 2017, the country intends to bring internal processing of cotton fiber to 70 %. [19].

At the same time, by 2021 the production of textile and clothing and knitted products will increase by 2.2 times compared to 2016, including ready-made fabrics - 2.7 times, knitted fabrics - 3 times, knitted goods – 3.4 times, hosiery – 3.7 times. It is planned to increase the export of products by 2 times [21].

Currently, Uzbekistan takes consistent steps to increase the volume of cotton fiber processing. In particular, it is planned to create 112 modern, high-tech industrial factories, expand, modernize and technologically upgrade 20 operating capacities. All this will increase the export potential of the industry up to \$2.5 billion a year and create more than 25,000 jobs [21].

Despite above-mentioned efforts, identified some kind of deficiencies in the sphere [22]:

- 55 cotton processing enterprises from 98 have not been well maintained during last 10 years. As a result of this, equipment in the factories does not meet the essential technic requirements. Since the economic efficiency and labour-intensity of current means do not satisfy accepted standards and demands more energy and metal consumption, the period of re-processing of raw cotton is delaying. Hence the expenses on transportation are highly increasing.

- Because of lack of automatic control and production indicators perfect calculating system, detected repetitive stealing in the sector.

- Moreover measuring facilities and instruments of cotton dirtiness and humidity are updated physically and rationally. Similarly there's a high level of personal factor. So this feature greatly causes to a low productivity and intensity in the sector.

- Cotton-textile system becomes not more economically beneficial for participants in the cotton market, especially have been indicated decrease in the volume of production in "Uzpakhtasanoat" JSC's cotton processing enterprises.

That's why, in certain areas in the course of creation the integrated agro-industrial structures is created qualitatively new formation on the basis of the effective-rational principle when the consecutive combination of two or several interacting elements, consecutive multistage production gives new high-quality organizational management.

At the same time, today because of some problems during the collecting and realization on government procurement of cotton-raw, through commercial agents to "Uzpakhtasanoat" JSC and its regional divisions which carry out a task of mutual settlements with regional associations of farmer where final financial settlements between them sometimes continues for very long period that exerts negative impact on a state, in providing the circulating current assets for seasonal production of farms [23].

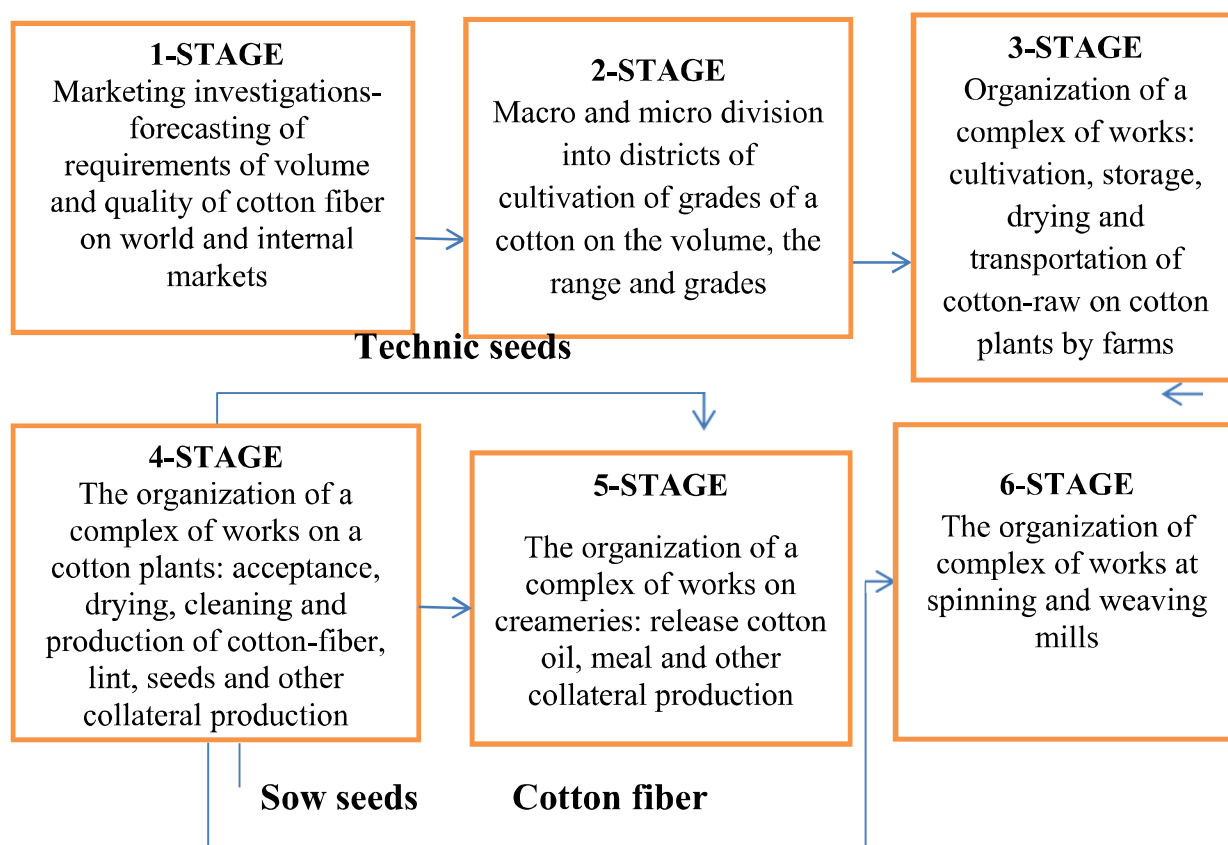


Figure. 1 Scheme of vertical clustering of the main production stages of the cotton industry in agro-industrial complex

Creation the clusters in agro-industrial complex is one of the most important factors of development. During creation of favorable policy of development of

integration of agro-industrial complex, also positively influences allied industries of textile and light industry and the sector in general.

The sequence and continuity of engineering procedures of release cotton production from one production (stage) to another (the subsequent stage) allows to consider them in common for implementation of works on comprehensive planning and management in the form of interrelation between them. Main goal of integration as process is creation of such vertical integration structure which is capable not only to provide competitiveness of the enterprises and receiving profit but also to provide the situation of stability in the market and profitability of production economic activity in the long term.

Source: S.S. Kasimov. Features of using cluster method in development of integration inter industrial structures in agro-industrial complex. Scientific article 2016.[18]

In the given model (Fig. 1) the main stages of a vertical clustering of multistage production in the cotton industry of agro-industrial complex are shown. The given stages with 1-3 higher are the main components of a clustering the agro-industrial integration which are characterized by numerous market agro-natural factors. Therefore, the plurality and heterogeneity of elements in a cluster and partially mixed form of integration of structures subjects of the general integration demands, a combination of head enterprise to other stages "subjects" of integration along a technological chain of productions of the enterprises of textile and light industry within the cotton industry, special approach to development – models for joint planning and management.

The main integrator of a clustering the cotton industry in agro-industrial integration, is farmer cotton-growing farms, and as the main components (subjects) serve cotton farm and creameries and also the machine tractor farms which are responsible for repair and security of the equipment. A certain effective option of selection grades of cotton forms a starting base for the solution the problem of land

distribution under the chosen selection grades of cotton, the further organization of sowing works and cotton production in general.

The next main link in a cotton complex is the cotton-processing industry. In this link are performed works on purchasing, storage, processing of cotton-raw and production of qualitative cotton production. Cotton fiber is considered as the main product of cotton breeding [24].

The competitiveness of cotton fiber, first of all, is connected with quality of the prepared cotton-raw, its correct storage, progressiveness of the equipment used when processing and technologies, qualification of experts. One of the key indicators of defining efficiency of results of the cotton-processing plants is the production of cotton fiber. If when preprocessing cotton-raw reaches a high exit and cotton fiber quality, according to this income from the made production will be high. And, in turn, it is very important in the conditions of market economy.

Conclusion and recommendations

From the analysis above, features of cluster formation in the cotton industry, in relation to agro-industrial complex on the basis of the integrated technologies, it is possible to conclude that integration processes represent difficult multi-stage productive and economic system with multilevel structure. Meanwhile integration processes are rather mobile, adaptive, and capable in order to provide competitive positions to subjects of managing.

Formation of integration cluster structures in the Republic of Uzbekistan is in a stage of formation and development. The problem solution that puts today for clusters requires existence of a number of the factors causing expediency and efficiency of formation these integrated structures. Being merging of the enterprises and organizations, the cluster has the following most characteristic features:

- integration of productions, resources, other competitive advantages;
- existence of certain interrelations rather than steady interrelations, including on a technological chain;

- at the list of participants of a cluster presence of subjects from various economic branches, connected by some common goals, but at the same time keeping independence (autonomy in decision-making and ownership rights on assets);
- existence of the large leading organization that defines long-term economic, investment and other strategy of whole cluster;
- combination of internal cooperation with internal competition;
- simultaneous existence of unity and contrast of interests of participants (that exists from their cooperation and the competition).

Importance of clusters development in the cotton industry of Uzbekistan is connected with existence of own source of raw materials and also existence direct production and technological communications and multistage process of production between participants (research and design institutions, farms, groups and separate machine-building, tractor farms the providing technical, transport, and other means for production of cotton production) of integration structures in the cotton industry of which the following peculiarities must be identified:

- 1) Necessity of use of traditional experience of farming and system of agrarian production for our country, first of all, positive specifics of last experience of agricultural organizations;
- 2) The comprehensive analysis of organizational and economic conditions of integration processes and establishments of certain phasic borders of the cotton industry in agrarian and industrial complex from positions of system development of economy in general;
- 3) Accounting of dependence of the subsequent on the previous stages in multistage production;
- 4) Systematization of market researches on product sales;
- 5) Unity and combination of sustained interests on quality released production;
- 6) Definition of head enterprise – the leader of integration;
- 7) Uniform complex organization of planning and management of participants of integration;

- 8) Developing the system of economic security;
- 9) Community and unity of the social purposes;
- 10) Creation uniform and concrete landmark models and procedures for integration structures [18].

During creation of clusters, first of all, it is necessary to accurate concrete state model of investment partnership with participants and subjects of the major spheres infringing on national interests. During creation of a cluster in the cotton industry it is necessary to improve the mechanism of distribution of income between subjects of integration depending on price ratios in the market.

The offered approach for cluster policy will allow creating innovative development model of agrarian and industrial complex both down, and across which is based on consolidation of two activities: optimization of the available resources usage and the state support of the innovative projects directed to support development of the cotton industry.

References:

- [1]. The Decree of the President of the Republic of Uzbekistan from February 7, 2017 " On Strategy for the further development of the Republic of Uzbekistan in 2017-2021", PD-4947
- [2]. Speech of President of the Republic of Uzbekistan to Oliy Majlis on December 29, 2018. <http://www.press-service.uz>.
- [3]. Marshall A. Principles of economic science. In three books. M.: Progress-Univers.1993-594p.
- [4]. M. Porter. Competitive advantages of nations. N.York: Free Press, 1990.
- [5]. Rosenfeld, S.A. Bringing business clusters into the mainstream of economic development//European planning studies.-1997-No5-P.3-23.
- [6]. Dakhmen E. Entrepreneurial activity and the development of Swedish industry.1919-1939- Stockholm, 1950.
- [7]. A.O.Ayusheev. Formation of integrated structures of the agro-industrial complex of the region: problems and prospects //Monograph.Novosibirsk.2013.